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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,774	11/04/2003	Masako Suehiro	0879-0419P	5909
2292 7590 01/18/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER	
			CUTLER, ALBERT H	
			ART UNIT	PAPER NUMBER
			2621	
SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE		DELIVERY MODE	
3 MONTHS	01/18/2007		ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/18/2007.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/699,774	SUEHIRO, MASAKO	
	Examiner Albert H. Cutler	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 November 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/04/2003</u>  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. This office action is in response to communication filed on November 04, 2003.

***Information Disclosure Statement***

2. The Information Disclosure Statement mailed on November 04, 2003, was received and has been considered by the examiner.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

4. The drawings are objected to because of a lack of clarity and precision. In figure 1, the Return button is labeled 100, whereas in the specification it is labeled 110. Please change the number on the drawing to 110. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief

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description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The disclosure is objected to because of the following informalities: Lack of clarity and precision. In many instances in the specification and the claims, the word "device" is written as "devise". Please change all instances of the word "devise" to read "device".

Appropriate correction is required.

### ***Claim Objections***

6. Claim 3 is objected to because of the following informalities: Lack of Clarity and Precision.

Claim 3 recites the automatic mode switching device of the image sending apparatus switches the communication mode of the **second communication device** to the second communication mode in a case where a current communication mode is the first communication mode and it is in a non-connected state after connecting to the

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external devise.. Upon further examination it appears that "second communication device" should read "first communication device". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camara et al.(US Patent Application Publication 2002/0178304) in view of Takahashi(US Patent 6,867,882).

Consider claim 1, Camara et al. teaches:

An image sending and receiving system(figures 1 and 2), comprising:

an image sending apparatus("USB Mass Storage Digital Camera", 224, figure 2, paragraph 0027. The camera(224) communicates with the user portion(250) through USB.) which comprises:

an image capturing device which captures an image(The image capturing device is a "USB Mass Storage Digital Camera", 224, figure 2, paragraph 0027);

a recording device which records the captured image on a recording medium(paragraph 0014, The camera here acts as a storage device for the computer(i.e. records captured images on a recording medium) and that recording medium comprises a hard drive, compact disc, etc.)

a first communication device(see figure 2, the camera(224) communicates on one end of a USB interface) which has a first communication mode("Read Info" paragraph 0049) capable of sending the selected image(Paragraph 0050, The "Read Info" command requests a data transfer from the camera, one type of such data transfers is an "Image".), and a second communication mode("Start Stop Capture" paragraph 0059) for functioning as an external recording device for the external devise(Paragraph 0060, The "Start Stop Capture" command requests that the camera capture images(i.e. function as an external recording device)); and

an automatic mode switching device(paragraph 0028, The "Windows Image Acquisition Wizard and other WIA enabled applications", 210, figure 2, act as automatic mode switching devices by providing "pass-through" commands to the camera, which are in turn executed by the control system(i.e. mode switching device, 230) of the camera(224)) which automatically switches(Because the commands come from an

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external devices(250), no manual switching of the camera is involved, paragraph 0027) between the first communication mode("Read Image") and the second communication mode("Start Stop Capture") in the first communication device(USB); and  
an image receiving apparatus("User component", 250, figure 2, paragraph 0027)  
which comprises:

a second communication device("File system interface", 214, figure 2) which performs at least communication in the first communication mode(Initialized commands are passed through the "file system interface", 214, to the camera through USB. These include Picture Transfer Protocol commands. Paragraph 0028) with the image sending apparatus(224);

a recording device which records the image received(Paragraph 0018 details computer readable media and storage media(i.e. recording devices) used by the user component, 250.) through the second communication device(250);

and a mode switch control device(The WIA Wizard and WIA Enabled Applications, 210, figure 2, of the user component(250) control the mode switching of the camera, paragraph 0028) which controls a switch between the communication modes(The user component(250) acts as a mode switch control device by using commands to change between modes of the camera(224), paragraph 0040. A list of the different commands(i.e. modes) is shown in the chart between paragraphs 0032 and 0033, and these modes are detailed in subsequent paragraphs 0036-0063) of the image sending apparatus(224), wherein:

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the mode switch control device(210) of the image receiving apparatus(250) determines whether or not the communication mode with the image sending apparatus is the first communication mode(One of the commands is a “Test Unit Ready” command, paragraphs 0036-0037, which determines if the test unit is ready(i.e. in the correct communication mode)), and sends a conversion command for ordering change to the first communication mode if determined that a current communication mode of the image sending apparatus is not the first communication mode(The mode switch control device can send a “Read Info” command to change to the first communication mode(paragraph 0049). It can also send a “Reset” command to reset the camera to a default state(paragraph 0062)); and

on receiving the conversion command(“Read Info”) from the image receiving apparatus(250), the automatic mode switching device(230) of the image sending apparatus(224) switches the communication mode of the first communication device(USB) to the first communication mode(The “Read Info” command requests that the camera transfer data through the USB to the user component(i.e. operate in the first communication mode, paragraphs 0049-0050)).

However, Camara et al. does not explicitly teach that the image capturing device contains an image selecting device which selects a desired image of images recorded on the recording medium, or that the image capturing device is capable of sending an image capturing command to an external device. Camara et al. also does not teach a transfer instruction device which outputs a transfer instruction for transferring the image

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selected by the image selecting device to the external devise through the first communication device.

Like Camara et al., Takahashi teaches of an image inputting apparatus(101, figure 1) that communicates with an external device(information processing apparatus,102, figure 1). The devices of Camara et al. communicate through communication units 111, 118, and 120. Also like Camara et al., the image inputting apparatus(101) of Takahashi senses images and stores them in memory when provided with an external instruction to do so(column 4, lines 10-29). In figure 2, column 5, line 56 through column 6, line 24, Takashi illustrates the image inputting apparatus(camera, 101) more clearly.

In addition to the teaching of Camara et al., Takashi teaches that the image capturing device(camera, 101) contains an image selecting device(204 and 205, figure 2) which selects a desired image of images recorded on the recording medium(The "+" and "-" buttons are used to select images from those stored in image data memory(109), column 5, line 66 through column 6, line 5), and that the image capturing device(101) is capable of sending an image capturing command(The user can press release button(206, figure 2) to input a print instruction to the image capturing device(101), column 6, lines 6-16. This sends a print command(i.e. image capturing command) to the information processing apparatus(102)) to an external device(102).

Furthermore, Takahashi teaches of a transfer instruction device(release button, 206, figure 2) which outputs a transfer instruction for transferring the image(column 6,

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lines 6-16) selected by the image selecting device(204 and 205) to the external devise(102) through the first communication device(111).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the image selecting device and the transfer instruction device as taught by Takahashi in the image capturing device taught by Camara et al. because it is difficult for someone who is unaccustomed with a computer to perform image printing operations, and the image selection and transfer instruction devices provide the benefit of allowing a user to perform the print operation easily without interaction with a computer(Takahashi, column 1, lines 35-44).

Consider claim 2, and as applied to claim 1 above, Camara et al. does not explicitly teach that the image sending apparatus further comprises a manual mode switching device which switches between the first communication mode and the second communication mode.

However, Takahashi teaches that the image sensing apparatus(101) further comprises a manual mode switching device("mode setting dial", 202, figure 2, column 5, lines 56-60) which switches between the first communication mode("image sensing mode") and the second communication mode("print mode").

The mode switching by the automatic mode switching device of Camara et al.(see claim 1) would take preference over the mode switching by the manual mode switching device(202) of Takahashi because the commands from the user component(250) are used to control the control system(230) of the image capture

device(224) directly("The intended command is obtained and then executed by the control system(230) located in the Mass Storage Camera(224)" These commands are detailed in paragraphs 0032-0062).

Consider claim 3, and as applied to claim 1 above, Camara et al. further teaches: the automatic mode switching device(230) of the image sending apparatus(224) switches the communication mode of the first communication device(USB) to the second communication mode("Start Stop Capture") in a case where a current communication mode is the first communication mode("Read Info") and it is in a non-connected state after connecting to the external device(250)(In paragraph 0062, Camara et al. teaches of a "Reset Device" command. This command would reset the device to a default state. A default state for an unconnected mass storage camera would be as an image capturing device).

Consider claim 4, and as applied to claim 1 above, Camara et al. further teaches that the first communication mode("Read Info") is PTP mode(Camara et al. teaches that the device operates using Picture Transfer Protocol (PTP) commands, paragraph 0028), and the second communication mode("Start Stop Capture") is a mass storage mode(The "Start Stop Capture" mode constitutes mass storage mode because the camera used is a mass storage camera, paragraph 0028).

Consider claim 5, and as applied to claim 1 above, Camara et al. further teaches that the image sending apparatus is a digital camera(Mass Storage Class Digital Camera, 224, figure 2, paragraph 0027).

Consider claim 6, and as applied to claim 1 above, Camara et al. further teaches that the image receiving apparatus is a personal computer("PC", 250, figure 2, paragraph 0027).

Consider claim 7, Camara et al. teaches:

an image sending apparatus("USB Mass Storage Digital Camera", 224, figure 2, paragraph 0027. The camera(224) communicates with the user portion(250) through USB.) which comprises:

an image capturing device which captures an image(The image capturing device is a "USB Mass Storage Digital Camera", 224, figure 2, paragraph 0027);

a recording device which records the captured image on a recording medium(paragraph 0014, The camera here acts as a storage device for the computer(i.e. records captured images on a recording medium) and that recording medium comprises a hard drive, compact disc, etc.)

a communication device(see figure 2, the camera(224) communicates on one end of a USB interface) which has a first communication mode("Read Info" paragraph 0049) capable of sending the selected image(Paragraph 0050, The "Read Info" command requests a data transfer from the camera, one type of such data transfers is

an "Image".), and a second communication mode("Start Stop Capture" paragraph 0059) for functioning as an external recording device for the external devise(Paragraph 0060, The "Start Stop Capture" command requests that the camera capture images(i.e. function as an external recording device)); and

an automatic mode switching device(paragraph 0028, The "Windows Image Acquisition Wizard and other WIA enabled applications", 210, figure 2, act as automatic mode switching devices by providing "pass-through" commands to the camera, which are in turn executed by the control system(i.e. mode switching device, 230) of the camera(224)) which automatically switches(Because the commands come from an external devices(250), no manual switching of the camera is involved, paragraph 0027) between the first communication mode("Read Image") and the second communication mode("Start Stop Capture") in the communication device(USB);

wherein on receiving the conversion command ordering change to the first communication mode("Read Info") from the image receiving apparatus(250) through the communication device(USB), the automatic mode switching device(230) switches the communication mode of the communication device to the first communication mode(The mode switch control device can send a "Read Info" command to change to the first communication mode(paragraph 0049). It can also send a "Reset" command to reset the camera to a default state(paragraph 0062). The "Read Info" command requests that the camera transfer data through the USB to the user component(i.e. operate in the first communication mode, paragraphs 0049-0050).

However, Camara et al. does not explicitly teach that the image capturing device contains an image selecting device which selects a desired image of images recorded on the recording medium, or that the image capturing device is capable of sending an image capturing command to an external device. Camara et al. also does not teach a transfer instruction device which outputs a transfer instruction for transferring the image selected by the image selecting device to the external device through the communication device.

Like Camara et al., Takahashi teaches of an image inputting apparatus(101, figure 1) that communicates with an external device(information processing apparatus,102, figure 1). The devices of Camara et al. communicate through communication units 111, 118, and 120. Also like Camara et al., the image inputting apparatus(101) of Takahashi senses images and stores them in memory when provided with an external instruction to do so(column 4, lines 10-29). In figure 2, column 5, line 56 through column 6, line 24, Takashi illustrates the image inputting apparatus(camera, 101) more clearly.

In addition to the teaching of Camara et al., Takashi teaches that the image capturing device(camera, 101) contains an image selecting device(204 and 205, figure 2) which selects a desired image of images recorded on the recording medium(The "+" and "-" buttons are used to select images from those stored in image data memory(109), column 5, line 66 through column 6, line 5), and that the image capturing device(101) is capable of sending an image capturing command(The user can press release button(206, figure 2) to input a print instruction to the image capturing

device(101), column 6, lines 6-16. This sends a print command(i.e. image capturing command) to the information processing apparatus(102) to an external device(102).

Furthermore, Takahashi teaches of a transfer instruction device(release button, 206, figure 2) which outputs a transfer instruction for transferring the image(column 6, lines 6-16) selected by the image selecting device(204 and 205) to the external devise(102) through the first communication device(111).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the image selecting device and the transfer instruction device as taught by Takahashi in the image capturing device taught by Camara et al. because it is difficult for someone who is unaccustomed with a computer to perform image printing operations, and the image selection and transfer instruction devices provide the benefit of allowing a user to perform the print operation easily without interaction with a computer(Takahashi, column 1, lines 35-44).

Consider claim 8, Camara et al. teaches:

An image receiving apparatus("User component", 250, figure 2, paragraph 0027) comprising:

a communication device("File system interface", 214, figure 2) which has a first communication mode capable of capturing an image(Initiated commands are passed through the "file system interface", 214, to the camera through USB. These include

Picture Transfer Protocol commands. Paragraph 0028) from an image sending apparatus(224);

a recording device which records the image received(Paragraph 0018 details computer readable media and storage media(i.e. recording devices) used by the user component, 250.) through the communication device(250); and

a mode switch control device(The WIA Wizard and WIA Enabled Applications, 210, figure 2, of the user component(250) control the mode switching of the camera, paragraph 0028) which switches communication modes of the image sending apparatus(The user component(250) acts as a mode switch control device by using commands to change between modes of the camera(224), paragraph 0040. A list of the different commands(i.e. modes) is shown in the chart between paragraphs 0032 and 0033, and these modes are detailed in subsequent paragraphs 0036-0063) of the image sending apparatus(224), wherein:

the mode switch control device(210) of the image receiving apparatus(250) determines whether or not the communication mode with the image sending apparatus is the first communication mode(One of the commands is a “Test Unit Ready” command, paragraphs 0036-0037, which determines if the test unit is ready(i.e. in the correct communication mode)), and sends a conversion command for ordering change to the first communication mode if determined that a current communication mode of the image sending apparatus is not the first communication mode(The mode switch control device can send a “Read Info” command to change to the first communication mode(paragraph 0049). It can also send a “Reset” command to reset the camera to a default state(paragraph 0062)); and

on receiving the conversion command("Read Info") from the image receiving apparatus(250), the automatic mode switching device(230) of the image sending apparatus(224) switches the communication mode of the first communication device(USB) to the first communication mode(The "Read Info" command requests that the camera transfer data through the USB to the user component(i.e. operate in the first communication mode, paragraphs 0049-0050)).

However, Camara et al. does not explicitly teach that the image capturing device contains an image selecting device which selects a desired image of images recorded on the recording medium, or that the image capturing device is capable of sending an image capturing command to the receiving apparatus. Camara et al. also does not teach a transfer instruction device which outputs a transfer instruction for transferring the image selected by the image selecting device to the receiving apparatus through a communication device.

Like Camara et al., Takahashi teaches of an image inputting apparatus(101, figure 1) that communicates with an image receiving apparatus(information processing apparatus,102, figure 1). The devices of Camara et al. communicate through communication units 111, 118, and 120. Also like Camara et al., the image inputting apparatus(101) of Takahashi senses images and stores them in memory when provided with an external instruction to do so(column 4, lines 10-29). In figure 2, column 5, line 56 through column 6, line 24, Takashi illustrates the image inputting apparatus(camera, 101) more clearly.

In addition to the teaching of Camara et al., Takashi teaches that the image capturing device(camera, 101) contains an image selecting device(204 and 205, figure 2) which selects a desired image of images recorded on the recording medium(The "+" and "-" buttons are used to select images from those stored in image data memory(109), column 5, line 66 through column 6, line 5), and that the image capturing device(101) is capable of sending an image capturing command(The user can press release button(206, figure 2) to input a print instruction to the image capturing device(101), column 6, lines 6-16. This sends a print command(i.e. image capturing command) to the information processing apparatus(102) to the image receiving apparatus(102).

Furthermore, Takahashi teaches of a transfer instruction device(release button, 206, figure 2) which outputs a transfer instruction for transferring the image(column 6, lines 6-16) selected by the image selecting device(204 and 205) to the image receiving apparatus(102) through a communication device(111).

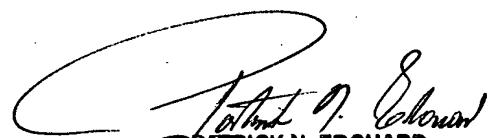
Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the image selecting device and the transfer instruction device as taught by Takahashi in the image capturing device taught by Camara et al. in order to send commands to the image receiving apparatus because it is difficult for someone who is unaccustomed with a computer to perform image printing operations, and the image selection and transfer instruction devices provide the benefit of allowing a user to perform the print operation easily without interaction with a computer(Takahashi, column 1, lines 35-44).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert H. Cutler whose telephone number is (571)-270-1460. The examiner can normally be reached on Mon-Fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571)-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC



PATRICK N. EDOUARD  
SUPERVISORY PATENT EXAMINER